

REMARKS

Claims 1, 3, 4, 9-27 are the pending claims in the application. Claim 1 has been amended in lieu of the Examiner's Advisory Action dated April 19, 2006 in which the Examiner indicated that Applicants' Amendment of April 6, 2006 raised new issues. The Examiner kindly elaborated on his comments in the Advisory Action during a teleconference with Applicants' attorneys, by stating that the previous claims did not have any specific ranges for the amount of sunflower but only for the amount of the triester and thus the new claims raised new issues. Applicants have accordingly amended Claim 1. Support for this amendment is found throughout the specification and specifically at page 11, paragraph [0043] and in original Claims 1 and 5-7. Claims 5-7 have been cancelled. No new matter has been introduced into the claims by these amendments. Reconsideration of the application in light of the amendments above and remarks, which follow, is respectfully requested.

Claim Rejections Under 35 U.S.C. §103 (a)

The Examiner has rejected the claims under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 5,252,649 ("Hausmann"). The Examiner alleges that Hausmann discloses rubber compositions for tire tread members having plasticizer constituents which are fatty acid triglyceride compounds comprising >50% oleic acid triesters and wherein the oleic acid triesters are extracted from vegetable and/or sunflower oil. The examiner further alleges that Hausmann suggests diene elastomers and the claimed mass fraction of the present claims.

The Claimed Invention

The present invention is directed to a cross-linkable or cross-linked rubber composition usable as a tread of a tire, and to a tire incorporating this tread. The rubber composition is based on at least one diene elastomer and a plasticizer which comprises (1) one or more synthetic and/or natural compounds not extracted from petroleum in a mass fraction of from 45% to 100%, wherein at least one of said natural compounds is sunflower oil, said compounds comprising at least one glycerol fatty acid triester, wherein the fatty acids in said triester comprise oleic acid in a mass fraction equal to or greater than 70%, and wherein the composition comprises from about 10 to about 40 phr of the compounds, and (2) one or more paraffinic, aromatic or naphthenic type plasticizing oils extracted from petroleum in a mass fraction of from 55% to 0%.

The Prior Art

Hausmann discloses a plasticizer constituent in a rubber mixture of a tread member of a pneumatic tire which contains at least partially one fatty acid triglyceride, preferably a natural rapeseed oil, in which more than 50% of the fatty acid residues are present as oleic acid residues in an oleic acid/linoleic acid ratio of greater than or equal to 2:1. *See* Abstract. The tires are said to have improved traction upon ice and snow. Hausmann teaches that the tires have a reduced low temperature rigidity and that very small amounts of rapeseed oil achieve such effects. *See* column 4, lines 32-40.

There is no *Prima Facie* Case of Obviousness

The Hausmann patent does not support a *prima facie* case of obviousness. To establish a *prima facie* case of obviousness, three criteria must be met. First, there must be some suggestion or motivation in the cited references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Third, the combined references must teach or suggest all the claimed limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and must not be based on the Applicants disclosure. *In re Vaeck*, 947 F2d 488, 20 USPQ 2d 1438 (Fed. Cir. 1991); MPEP 2142.

In this case, Hausmann does not teach all the claim limitations of the present claims. The present claims are directed to a composition for use in a tire tread, which is based on one or more diene elastomers and a plasticizer. The plasticizer of the present claims includes one or more synthetic and/or natural compounds not extracted from petroleum present in a mass fraction of from 45% to 100%, wherein at least one natural compound not extracted from petroleum is sunflower oil, and wherein the compounds comprise at least one glycerol fatty acid triester and wherein the fatty acids in said triester comprise oleic acid in a mass fraction equal to or greater than 70%. The plasticizer of the present claims further includes one or more plasticizing oils extracted from petroleum in a mass fraction of from 0% to 55%. The plasticizing oils are selected from the group consisting of paraffinic, aromatic and naphthenic oils.

Applicants' claimed invention is not taught or suggested by Hausmann. Hausmann teaches the use of rapeseed oil in the amount of 2-35 phr. *See* column 3, lines 59-65. It is

known in the art that rapeseed oil comprises about 50% of oleic acid and generally not more than 55% oleic acid. *See, e.g.,* Hausmann, column 3, line 10. Hausmann further teaches that the preferred amount of rapeseed oil in the composition is 4-8 phr (*see* column 3, lines 60-65) and more preferably, 5 phr (*see* column 5, lines 36-40 and Table 2 and Table 1).

In contrast, the present claimed invention requires that at least one natural compound is sunflower oil and that the compounds comprise at least one glycerol fatty acid triester, wherein the fatty acids in the triester comprise oleic acid in a mass fraction equal to or greater than 70% and wherein the amount of the compounds in the composition is from 10 to 40 phr.

Nothing in Hausmann teaches or suggests the elements of the present invention mentioned in the preceding paragraph. Specifically, Hausmann does not teach or suggest that at least one natural compound is sunflower oil or that the amount of the compounds in the composition is from 10 to 40 phr, or that the fatty acids in the triester comprise oleic acid in a mass fraction of greater than 70%.

Accordingly, Applicants submit that the Examiner has not established a *prima facie* case of obviousness because Hausmann does not teach or suggest all of the claimed limitations of the present invention. Therefore, Applicants respectfully request withdrawal of the rejection of the claims as obvious under 35 U.S.C. § 103(a) in view of Hausmann.

Conclusion

In light of the Amendments and remarks made herein, Applicants believe the present application is in condition for allowance. Accordingly, favorable reconsideration of the application is earnestly solicited. Please send any further correspondence relating to this application to the undersigned attorneys at the address below.

Respectfully submitted,



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